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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,576	02/23/2004	Tohru Koike	P1327US	9570
1218	7590	05/18/2006	EXAMINER	
CASELLA & HESPOS 274 MADISON AVENUE NEW YORK, NY 10016			HAQ, SHAFIQUK	
			ART UNIT	PAPER NUMBER
			1641	
DATE MAILED: 05/18/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/784,576	KOIKE ET AL.	
	Examiner	Art Unit	
	Shafiqul Haq	1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 7, 8, 9, 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. With respect to claims 2, 9 and 10, "a" in line 2 should be "the" in order to properly indicating "labeling group".
4. Claim 7 recites the phrase "a C1-C6 alkylene group having, at one end thereof, a group selected from-----; a C1-C6 group having, at the opposite ends thereof, two groups selected from-----; and a group in which two or more than two groups selected from the group consisting-----". The claim language is unclear as well as confusing and it is not clear what chemical structure is encompassed by this confusing language. It is not clear what chemical group resides at the other end with the language "a C1-C6 alkylene group having, at one end thereof, a group selected--". It is also not clear the arrangement of the groups by the language "and a group in which two or more than two groups selected from the group consisting".
5. Claim 8 recites the term "R1 is a reactive group for forming". It is not unclear what group or groups are encompassed as a reactive group for forming the groups as recited in claim 8.

6. Claim 8 recites the phrase “a C1-C6 alkylene group having, at one end thereof, a group selected from-----; a C1-C6 group having, at the opposite ends thereof, two groups selected from-----; and a group in which two or more than two groups selected from the group consisting-----”. The claim language is unclear as well as confusing and it is not clear what chemical structure is encompassed by this confusing language. It is not clear what chemical group resides at the other end with the language “a C1-C6 alkylene group having, at one end thereof, a group selected--”. It is also not clear the arrangement of the groups by the language “and a group in which two or more than two groups selected from the group consisting”.
7. With respect to claims 10 and 12, it is unclear what group or groups are encompassed by the term “group containing a nitro oxide radical” as the groups containing nitro oxide has not been described in the specification.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claim 8 is rejected under 35 U.S.C. 102(a) as being anticipated by Koike et al (WO 03/053932 A1).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

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Present application recites a compound of formula (II) wherein R¹= reactive group.

Koike et al. disclose a compound of formula (II) that anticipates formula (II) compound of present invention wherein in referenced compound R=maybe the same or different from each other wherein three of the R=H and the other R= reactive group (e.g. as disclosed) (pages 4-5 and 14).

Therefore, the reference is deemed to anticipate the cited claim.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being obvious over Koike et al. (WO 03/053932 A1). Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Present application discloses a method for labeling and adsorbing phosphorylated peptide by a zinc complex of a compound of formula (I).

Koike et al. disclose binuclear zinc complex of a compound having a label/support as discussed in above paragraph 8. Koike et al disclose that the zinc complex of the compound binds to phosphorylated substance (paragraphs [0009-

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0010;0029-0030]) and can be used as capturing agent for phosphorylated substance (e.g. peptides or proteins) (paragraphs ([0020, 0020 and 0075])).

Koike et al do not disclose labeling phosphorylated peptides, but once a compound has been established that specifically binds to a target analyte (as disclosed by koike for binding and capturing phosphorylated peptides), one skilled in the art would clearly consider the labeled compound to label (bind) the analyte (e.g. phosphorylated peptides) in a sample for its capturing and as well as for its detection.

12. Claims 5-7, 9 and 11 are rejected under 35 U.S.C. 103(a) as being obvious over Koike et al. (WO 03/053932 A1) in view of Griffiths et al (US 6,120,768). Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Present application discloses a zinc complex of a compound of formula (I) wherein y is a label.

Koike disclose binuclear zinc complex of a compound of formula (I-0) (see abstract and claim 1) wherein R can be a reactive functional group (paragraphs [0011-0012] and claim 1). Koike also disclose that the complex compound can be bound to a label (e.g. solid support such a latex or magnetic particles) through linker/functional group (e.g. amino or a hydroxyl group) (paragraphs [0029; 0076]; for other functional group/linker see claim 1).

koike et al, however, do not disclose biotin (claim 2 of this application) as label.

Griffiths et al disclose biotin or avidin derivatives linked to a metal chelate (column 1, lines 15-20).

Since, biotin and avidin is common and known in the art to attach to chelate compound for detection, purification or targeting, it would have been obvious at the time of the invention to a person of ordinary skill in the art to use biotin as an equivalent label in the method of Koike et al for efficient detection or purification, with a reasonable expectation of success.

As for claim 7, Koike et al disclose method of preparing zinc complex (see paragraph [0024] and claim 10 of reference). Although koike et al. do not disclose the reaction step to attach label to the compound, the reaction step is inherent in the method of attaching to a support/label.

Response to Argument

13. Applicant's arguments filed 3/3/06 have been fully considered, and are persuasive to overcome the rejections under 35 USC 102 and 35 USC 103, but a WIPO publication (WO 03/053932 A1) of PCT application (PCT/JP02/13341) of the same inventor is applied which is applicable as 103 (a) art as described in this office action. Furthermore, amendments of claims necessitated new rejections under 35 USC 112.


Conclusion


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shafiqul Haq whose telephone number is 571-272-6103. The examiner can normally be reached on 7:30AM-4:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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EXAMINER
ART UNIT 1641


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